

OMB No. 0651-0011

Atty. Docket No. 07206.002701000	Serial No. To be assigned
Applicant George TUSZYNSKI et al.	
Filing Date October 3, 2001	Group: 1653

U.S. PATENT DOCUMENTS

Examiner Initial*		Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate
SwL	A.	5,426,100	06/20/95	Deutch et al.	514	15	
	B.	5,192,744	03/09/93	Bouck et al.	514	8	
	C.	5,190,918	03/02/93	Deutch et al.	514	15	
	D.	4,683,291	07/28/87	Zimmerman et al.	530	324	
	E.	4,305,872	12/15/81	Johnston et al.	260	112.5	
	F.	4,244,946	01/13/81	Rivier et al.	424	177	
	G.	4,105,602	08/08/78	Colescott et al.	260	8	
	H.	3,972,859	08/03/76	Fujino et al.	260	112.5	
	I.	3,862,925	01/28/75	Sarantakis et al.	260	112.5	
SwL	J.	3,842,067	10/15/74	Sarantakis et al.	260	112.5	

FOREIGN PATENT DOCUMENTS

		Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
SwL	K.	WO 92/17499	10/15/92	PCT			
SwL	L.	WO 90/01496	2/22/90	PCT			
SwL	M.	EP 0263 608	4/13/88	EP			
	N.						
	O.						

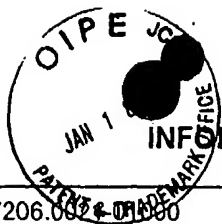
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

SwL	1.	Adams, "The Thrombospondin Family," <i>Current Biology</i> , 3:188-190 (1993).
I	2.	Aiken, "Isolation and Identification of a 23,000-Dalton Heparin Binding Fragment from the Amino Terminus of Bovine Thrombospondin," <i>Ach. Bio. Biophys</i> , 250:257-262 (1986).
I	3.	Albo, "Thrombospondin-1 and Transforming Growth Factor-Beta1 Promote Breast Tumor Cell Invasion Through Up-Regulation Of The Plasminogen/Plasmin System," <i>Surgery</i> , 122:493-500 (1997).
SwL	4.	Alexander, "Quantitative Adsorption of Platelet Glycoprotein G. (Thrombin-Sensitive Protein, Thrombospondin) to Barium Citrate," <i>Biochem. J.</i> , 217:67-71 (1984).

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FEB 27 2002

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Atty. Docket No.	07206.002 & 01000	Serial No.	To be assigned
Applicant	George TUSZYNSKI et al.		
Filing Date	October 3, 2001	Group:	1653

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
swl	5.	Arap et al, "Cancer Treatment by Targeted Drug Delivery to Tumor Vasculature in a Mouse Model," <i>Science</i> , 279:377-380 (1998).
	6.	Arnoletti, "Computer-Assisted Image Analysis of Tumor Sections for a New Thrombospondin Receptor," <i>The American Journal of Surgery</i> , 168:433-436 (1994).
	7.	Asch, "Thrombospondin Sequence Motif (CSVTCG) is Responsible for CD36 Binding," <i>Biochem. Biophys. Res. Commun.</i> , 82:1208-1217 (1992).
	8.	Barsky, "Laminin Molecular Domains Which Alter Metastasis in a Murine Model," <i>J. Clin. Inv.</i> , 74:843-48 (1984).
	9.	Clezardin, "Expression of Thrombospondin (TSP1) and Its Receptors (CD36 and CD51) in Normal, Hyperplastic, and Neoplastic Human Breast," <i>Cancer Res.</i> , 53:1421-1430 (1993).
	10.	Clezardin, "Isolation of Thrombospondin Released from Thrombin-Stimulated Human Platelets by Fast Protein Liquid Chromatography on an Anion Exchange Mono-Q Column," <i>J. Chromatog.</i> 296:249-56 (1984).
	11.	Connors, "Prodrugs in Cancer Chemotherapy," <i>Stem Cells</i> , 13:501-511 (1995).
	12.	Crombie, "Identification of a CD36-related Thrombospondin 1-binding Domain in HIV-1 Envelope Glycoprotein gp120: Relationship to HIV-1-specific inhibitory Factors in Human Saliva," <i>J. Exp. Med.</i> , 187:25-35 (1998).
	13.	Davis, "The Vaso-Occlusive Crisis Of Sickle Cell Disease," <i>BMJ</i> , 302: 1551-52 (1991).
	14.	Depoli, "Thrombospondin Interaction with Plasminogen, Evidence for Binding to a Specific Region of the Kringle Structure of Plasminogen," <i>Blood</i> , 73:976-82 (1989).
	15.	Dixit, "Characterization of a cDNA Encoding the Heparin and Collagen Binding Domains of Human Thrombospondin," <i>Proc. Natl. Acad. Sci.</i> 83:5449-53 (1986).
	16.	Dixit, "A Monoclonal Antibody Against Human Thrombospondin Inhibits Platelet Aggregation," <i>Proc. Natl. Acad. Sci.</i> , 82:3472-76 (1985).
	17.	Dixit, "Isolation and Characterization of a Heparin-binding Domain from the Amino Terminus of Platelet Thrombospondin," <i>J. Biol. Chem.</i> 259:10100-105 (1954).
	18.	Dunwiddie, "Antistasin, a Leech-derived Inhibitor of Factor Xa," <i>J. Biol. Chem.</i> , 264:16694-99 (1989).
	19.	Fields, "Virus Interactions with Cell Uptake Mechanisms," <i>Fundamental Virology</i> , 2nd Ed., 269-270 (1991).
	20.	Gasic, "Antimetastatic Effects Associated with Platelet Reduction," <i>Proc. Natl. Acad. Sci.</i> , 61:46-52 (1968).
swl	21.	Gasic, "Role of Plasma, Platelets, and Endothelial Cells in Tumor Metastasis," <i>Cancer Metastasis Rev.</i> , 3:99-116 (1984).

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FEB 27 2002

OFFICE OF PETITIONS



OMB No. 0651-0011

INFORMATION DISCLOSURE CITATION

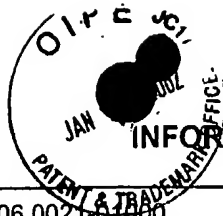
Atty. Docket No.	07206.002701008	Serial No.	To be assigned
Applicant George TUSZYNSKI et al.			
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
swl	22.	Geiger, "Amine Protecting Groups," <i>The Peptides</i> , 3:3-88 (1981).
	23.	Goundis, "Properdin, The Terminal Complement Components, Thrombospondin and the Circumsporozoite Protein of Malaria Parasites Contain Similar Sequence Motifs," <i>Nature</i> , 335:82-85 (1988).
	24.	Han, "Cloning and Expression of cDNA Encoding Antistasin, a Leech-derived Protein Having Anti-coagulant and Anti-metastatic Properties," <i>Gene</i> , 75:47-57 (1989).
	25.	Hennessey, "Complete Thrombospondin mRNA Sequence Includes Potential Regulatory Sites in the 3' Untranslated Region," <i>J. Cell. Biol.</i> , 108:729-36 (1989).
	26.	Herbst, "Differential Effects of Laminin, Intact Type IV Collagen, and Specific Domains of Type IV Collagen on Endothelial Cell Adhesion and Migration," <i>J. Cell. Biol.</i> , 106:1365-1373 (1988).
	27.	Holt, "Antistasin, an Inhibitor of Coagulation and Metastasis, Binds to Sulfatide (Gal (3-SO ₄) (Beta-1-1 Cer) and Has a Sequence Homology with Other Proteins that Bind Sulfated Glycoconjugates," <i>J. Biol. Chem.</i> , 264:12138-40 (1989).
	28.	Houghten, "General Method for the Rapid Solid-Phase Synthesis of Large Numbers of Peptides: Specificity of Antigen-Antibody Interaction at the Level of Individual Amino Acids," <i>Proc. Natl. Acad. Sci.</i> , 82:5131-5135 (1985).
	29.	Humphries, "A Synthetic Peptide from Fibronectin Inhibits Experimental Metastasis of Murine Melanoma Cells," <i>Science</i> , 233:467-70 (1986).
	30.	Iwamoto, "YIGSR, A Synthetic Laminin Pentapeptide, Inhibits Experimental Metastasis Formation," <i>Science</i> , 238:1132-34 (1987).
	31.	J. Varani, "Characterization of Thrombospondin Synthesis, Secretion and Cell Surface Expression by Human Tumor Cells," <i>Clin. Expl. Metastasis</i> , 7:265-76 (1989).
	32.	Jaffe, "Cultured Human Fibroblasts Synthesize and Secrete Thrombospondin and Incorporate it into Extracellular Matrix," <i>Proc. Natl. Acad. Sci.</i> , 80:998-1002 (1983).
	33.	Kanemoto, "Identification of an Amino Acid Sequence from the Laminin A Chain that Stimulates Metastasis and Collagenase IV Production," <i>Proc. Natl. Acad. Sci.</i> , 87:2279-83 (1990).
	34.	Kobayashi, "Partial Amino Acid Sequence of Human Thrombospondin as Determined by Analysis of cDNA Clones: Homology to Malarial Circumsporozoite Proteins," <i>Biochemistry</i> , 25:8418-25 (1986).
	35.	Lawler, "Isolation and Characterization of a High Molecular Weight Glycoprotein from Human Blood Platelets," <i>J. Biol. Chem.</i> , 253:8609-16 (1978).
	36.	Lawler, "Structural Organization of the Thrombospondin Molecule," <i>Seminars in Thrombosis & Hemostasis</i> , 13:245-254 (1987).
swl	37.	Lawler, "The Release of Heparin Binding Peptides from Platelet Thrombospondin by Proteolytic Action of Thrombin, Plasmin and Trypsin," <i>Thromb. Res.</i> , 22:267-79 (1981).

RECEIVED

FEB 27 2002

OFFICE OF PETITIONS



INFORMATION DISCLOSURE CITATION

OMB No. 0651-0011

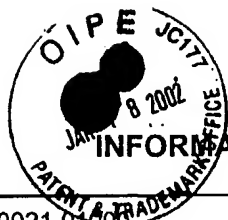
Atty. Docket No.	07206.0021-04000	Serial No.	To be assigned
Applicant	George TUSZYNSKI et al.		
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
SwL	38.	Lawler, "The Structural and Functional Properties of Thrombospondin," <i>Blood</i> , 67:1197-1209 (1986).
	39.	Lawler, "The Structure of Human Thrombospondin, an Adhesive Glycoprotein with Multiple Calcium-Binding Sites and Homologies with Several Different Positions," <i>J. Cell Biol.</i> , 103:1635-48 (1986).
	40.	Lawler, "Thrombospondin in Essential Thrombocythemia," <i>Blood</i> , 67:555-558 (1986).
	41.	Leung, "Role of Thrombospondin in Platelet Aggregation," <i>J. Clin. Invest.</i> , 74:1764-1772 (1984).
	42.	Majack, "Cell Surface Thrombospondin is Functionally Essential for Vascular Smooth Muscle Cell Proliferation," <i>J. Biol. Chem.</i> , 106:415-422 (1988).
	43.	Majack, "Control of Smooth Muscle Cell Growth by Components of the Extracellular Matrix: Autocrine Role for Thrombospondin," <i>Proc. Natl. Acad. Sci.</i> , 83:9050-54 (1986).
	44.	Majack, "Platelet-derived Growth Factor and Heparin-like Glycosaminoglycans Regulate Thrombospondin Synthesis and Deposition in the Matrix by Smooth Muscle Cells," <i>J. Cell Biol.</i> , 101: 1059-1070 (1985).
	45.	Märki, "Total Solid-Phase Synthesis of Porcine Gut Gastrin Releasing Peptide (GRP), a Mammalian Bombesin," <i>J. Am. Chem. Soc.</i> , 103:3178-85 (1981).
	46.	McPherson, "Isolation and Characterization of a Glycoprotein Secreted by Aortic Endothelial Cells in Culture," <i>J. Biol. Chem.</i> , 256:11330-36 (1981).
	47.	Merrifield, "Solid Phase Peptide Synthesis: I. The Synthesis of a Tetrapeptide," <i>J. Am. Chem. Soc.</i> , 85:2149-2154 (1963).
	48.	Mosher, "Physiology of Thrombospondin," <i>Annu. Rev. Med.</i> , 41:85-97 (1990).
	49.	Mumby, "Interactions of Thrombospondin with Extracellular Matrix Proteins: Selective Binding to Type V Collagen," <i>J. Cell Biol.</i> , 98:646-52 (1984).
	50.	Nathan, "Plasma Thrombospondin Levels in Patients with Gynecologic Malignancies," <i>Cancer</i> , 73:2853-2858 (1994).
	51.	Nicosia, "Matrix-Bound Thrombospondin Promotes Angiogenesis in Vitro," <i>J. Cell Biol.</i> , 124:183-193 (1994).
	52.	Nusrat, "A Role for Urokinase in Mediating Phorbol Ester Induced Macrophage-like Maturation and Adhesion of U937 and Other Myeloid Cells," <i>Fibrinolysis</i> , 6:71-76 (1992).
	53.	Pierschbacher, "Cell Attachment Activity of Fibronectin Can Be Duplicated by Small Synthetic Fragments of the Molecule," <i>Nature</i> , 309:30-33 (1984).
SwL	54.	Prater, "The Properdin-like Type I Repeats of Human Thrombospondin Contain a Cell Attachment Site," <i>J. Cell Biol.</i> , 112:1031-1040 (1991).

RECEIVED

FEB 27 2002

OFFICE OF PETITIONS



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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

SWL	55.	Pratt, "Thrombospondin in Malignant and Non-Malignant Breast Tissue," <i>Eur. J. Cancer Clin. Oncol.</i> , 25:343-350 (1989).
	56.	Qian, "Thrombospondin-1 Modulates Angiogenesis in Vitro by Up-Regulation of Matrix Metalloproteinase-9 in Endothelial Cells," <i>Exp. Cell Res.</i> , 235:403-412 (1997).
	57.	Raugi, "Thrombospondin Synthesis and Secretion by Cells in Culture," <i>J. Cell Biol.</i> , 95:351-354 (1982).
	58.	Rich, "Cell-Adhesive Motif in Region II of Malarial Circumsporozoite Protein," <i>Science</i> , 249:1574-1577 (1990).
	59.	Riser, "Thrombospondin Binding by Human Squamous Carcinoma and Melanoma Cells: Relationship to Biological Activity," <i>Exp. Cell Res.</i> , 174:319-329 (1988).
	60.	Robson, "A Highly Conserved Amino-Acid Sequence in Thrombospondin, Properdin and in Proteins from Sporozoites and Blood Stages of a Human Malaria Parasite," <i>Nature</i> , 335:79-82 (1988).
	61.	Roth, "Histopathology and clinical assessment correlate with the cysteine-serine-valine-threonine-systein-glycine (CSVTCG) receptor of thrombospondin-1 in breast tumors," <i>Histology & Histopathology</i> , 12:1013-1018 (1997).
	62.	Sasaki, "Sequence of the cDNA Encoding the Laminin B1 Chain Reveals a Multidomain Protein Containing Cysteine-Rich Repeats," <i>Proc. Natl. Acad. Sci.</i> , 84:935-39 (1987).
	63.	Schiller, "Synthesis of Side-chain to Side-chain Cyclone Peptide Analogs on Solid Supports," <i>Int. J. Peptide Protein Res.</i> , 25:171-177 (1985).
	64.	Stewart, "Solid-Phase Peptide Synthesis," <i>The Chemistry of Solid Phase Peptide Synthesis</i> , 1-26 (1969).
	65.	Sugihara, "Thrombospondin Mediates Adherence of CD36+ Sickie Reticulocytes to Endothelial Cells," <i>Blood</i> , 80(10):2634-2642 (1993).
	66.	Switalska, "Radioimmunoassay of Human Platelet Thrombospondin: Different Patterns of Thrombospondin and Beta-Thromboglobulin Antigen Secretion and Clearance from the Circulation," <i>J. Lab. Clin. Med.</i> , 106:690-700 (1985).
	67.	Tam, "S _N 1 and S _N 2 Mechanisms for the Deprotection of Synthetic Peptides by Hydrogen Fluoride," <i>Int. J. Pept. Prot. Res.</i> 21:57-65 (1983).
	68.	Terranova, "Modulation of the Metastatic Activity of Melanoma Cells by Laminin and Fibronectin," <i>Science</i> , 226:982-85 (1984).
	69.	Tuszynski, "Biological Activities of Peptides and Peptide Analogues Derived from Common Sequences Present in Thrombospondin, Properdin, and Malarial Proteins," <i>J. Cell Biol.</i> , 116:209-217 (1992).
SWL	70.	Tuszynski, "Identification and Characterization of a Tumor Cell Receptor for CSVTCG, a Thrombospondin Adhesive Domain," <i>J. Cell Biol.</i> , 120:513-521 (1993).

RECEIVED

FEB 27 2002

OFFICE OF PETITIONS

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swl	71.	Tuszynski, "Isolation and Characterization of Antistasin," <i>J. Biol. Chem.</i> , 262:9718-9723 (1987).
	72.	Tuszynski, "Localization of Thrombospondin and Its Cysteine-Serine-Valine-Threonine-Systeine-Glycine-Specific Receptor in Human Breast Carcinoma," <i>Lab. Invest.</i> , 70:228-233 (1994).
	73.	Tuszynski, "Role of Thrombospondin in Hemostasis and Cell Adhesion," <i>Seminars in Thrombosis & Hemostasis</i> , 13:361-68 (1987).
	74.	Tuszynski, "Spectrophotometric Quantitation of Anchorage-Dependent Cell Numbers Using the Bicinchoninic Acid Protein Assay Reagent," <i>Anal. Bio.</i> , 84:189-91 (1990).
	75.	Tuszynski, "The Interaction of Human Platelet Thrombospondin with Fibrinogen: Thrombospondin Purification and Specificity of interaction," <i>J. Biol. Chem.</i> , 260:12240-5 (1985).
	76.	Tuszynski, "Thrombospondin Levels in Patients with Malignancy," <i>Thromb. And Haemost.</i> , 67:607-611 (1992).
	77.	Tuszynski, "Thrombospondin Promotes Cell-Substratum Adhesion," <i>Science</i> , 236:1570-1573 (1987).
	78.	Tuszynski, "Thrombospondin Promotes Platelet Aggregation," <i>Blood</i> , 72:109-115 (1988).
	79.	Tuszynski, "Thrombospondin, a Potentiator of Tumor Cell Metastasis," <i>Cancer Res.</i> , 47:4130-4133 (1987).
	80.	Vale, "Characterization of a 41-Residue Ovine Hypothalamic Peptide that Stimulates Secretion of Corticotropin and β -Endorphin," <i>Science</i> , 213:1394-1397 (1981).
	81.	Varani, "Thrombospondin-Induced Adhesion of Human Keratinocytes," <i>J. Clin. Invest.</i> , 81:1527-44 (1988).
	82.	Wang, "Inhibition of Breast Cancer Progression by an antibody to a Thrombospondin-1 Receptor," <i>Surgery</i> , 120:449-454 (1996).
	83.	Wang, "Thrombospondin-1 (TSP-1) Promotes the Invasive Properties of Human Breast Cancer," <i>J. Surgical Res.</i> , 63:39-43 (1996).
	84.	Wong, "Thrombospondin and Other Possible Related Matrix Proteins in Malignant and Benign Breast Disease," <i>Am. J. Pathol.</i> , 140:1473-1482 (1992).
	85.	Yabkowitz, "Expression and Initial Characterization of a Recombinant Human Thrombospondin Heparin Binding Domain," <i>J. Biol. Chem.</i> , 264:10888-96 (1989).
swl	86.	Yamashita, "Plasma Thrombospondin Levels in Patients with Colorectal Carcinoma," <i>Cancer</i> , 82:632-638 (1998).

RECEIVED

FEB 27 2002

OFFICE OF PETITIONS



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